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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/16/2003

Bernard Branchereau

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7149

4743

7590

02/07/2006

MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

EXAMINER

PATEL, VISHAL A

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/687,205	Applicant(s) BRANCHEREAU, BERNARD	
	Examiner Vishal Patel	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutter (US. 6,682,221) in view of Rigaux et al (US. 5,575,568) and further in view of Lederman (US. 5,492,339).

Rutter discloses a rotary shaft (7 or 5), a casing (27) filled with liquid in which the rotary shaft penetrates casing of bearing, a dynamic seal having sleeve (9), an annular lip (lip 29), the lip contacts the casing, the dynamic seal further having an annular encoder element of magnetizable material (8), the encoder element being secured to the sleeve, the annular surface of the encoder element extends radially (radial surface of encoder on a portion 15 of the sleeve), the lip is bonded to the encoder element (this is the case since the lip is made of elastomeric material), the sleeve is made of metal, the encoder element presents a first annular face facing radially inwards which is secured directly to an outside wall of the longitudinal extending sleeve (secured to 12), the second annular face facing radially outwards (opposite surface of the first annular face), the second annular face presents a portion extending along a fraction of the shaft (the second face extends beyond 5) which is not surrounded by the stationary casing (27), the encoder element presents a first annular face extending radially (radial face that contacts 15),

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which face is secured directly to a collar (15) of the sleeve that extends radially and a second annular face opposite the first annular face extending radially.

Rutter discloses the invention substantially as claimed above but fails to disclose that the encoder is made of elastoferite, the annular lip is made of polytetrafluoroethylene (PTFE) and a track provided with polarized marks. Rigaux discloses a device comprising a rotary shaft (rotary shaft 9 or shaft 4), a casing filled with liquid in which the rotary shaft penetrates (fluid in the bearing or fluid in the axle), a dynamic seal having a sleeve (13), an encoder (12) directly mounted on the sleeve and an annular lip made of synthetic material (lips 22a and 22b). The encoder is made of plastic or elastomer loaded with magnetic particles (ferrite is magnetic particles). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the encoder and the annular lip of Rutter be made of elastoferite and annular lip be made of synthetic material as taught by Rigaux to provide a strong bond between the encoder and the annular lip and lips that are wear-resistant (column 3, lines 60-65 and column 6, lines 5-6 of Rigaux).

Rutter and Rigaux disclose the invention substantially as claimed above but fails to disclose that the annular lip is made of synthetic material that is PTFE. Lederman discloses lip seals that are formed of rubber or less flexible material such as PTFE to provide low friction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the lip seal of Rutter and Rigaux to be made of PTFE as taught by Lederman, to provide low friction lip seals (column 1, lines 25-26 of Lederman).

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3. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutter, Rigaux and Lederman and further in view of Rigaux et. al. (US. 5,309,094, referred to as Rigaux '94).

Rutter, Rigaux and Lederman discloses the invention substantially as claimed above but fails to disclose a track with markings of north and south poles of a magnetic. Rigaux '94 discloses an encoder that is a magnetic member with track that is marked with north and south poles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the encoder of Rutter, Rigaux and Lederman to have track with markings as taught by Rigaux '94, to provide information of poles on the magnet (inherent teaching of marking of poles on a magnet).

Response to Arguments

4. Applicant's arguments with respect to claims 1-2 and 4-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sentoku teaches markings, Ouchi teaches encoder, Kurth teaches to seal a shaft by PTFE seals and Toda teaches an encoder having a lip seal directly bonded to the encoder.

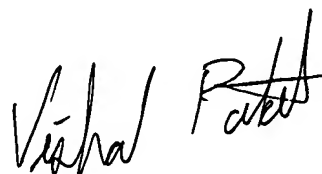
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. James Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
January 31, 2006

A handwritten signature in black ink, appearing to read "Vishal Patel". The signature is written in a cursive, stylized font.

Vishal Patel
Primary Patent Examiner
Tech. Center 3600